In re Appln. of Crystal et al Application No. 09/629,074

protein (e.g., VEGF<sub>A</sub>, VEGF<sub>B</sub>, VEGF<sub>C</sub>, VEGF<sub>D</sub>, VEGF<sub>E</sub>), and more preferably VEGF<sub>121</sub>, VEGF<sub>A13B</sub>, VEGF<sub>145</sub>, VEGF<sub>A162</sub>, VEGF<sub>165</sub>, VEGF<sub>182</sub>, VEGF<sub>189</sub>, or a derivative thereof, (see, e.g., U.S. Patents 5,332,671 (Ferrara *et al.*), 5,240,848 (Keck *et al.*); and 5,219,739 (Tischer *et al.*)). Most preferably, because of their higher biological activity, the angiogenic protein is VEGF<sub>121</sub> or VEGF<sub>165</sub>, particularly VEGF<sub>121</sub>. Inasmuch as VEGF<sub>121</sub> typically binds heparin with lesser affinity than does VEGF<sub>165</sub>, VEGF<sub>121</sub> is particularly preferred for use in the inventive method. While VEGF proteins are preferable for use in the inventive method, other angiogenic proteins include connective tissue growth factor (CTGF), VEGF2, VEGF-C, fibroblast growth factors (FGFs) (e.g., aFGF, bFGF, and FGF-4), angiopoiteins, angiopoetin homologous proteins, angiogenin, angiogenin-2, and P1GF (see, e.g., U.S. Patents 5,194,596, 5,219,739, 5,338,840, 5,532,343, 5,169,764, 5,650,490, 5,643,755, 5,879,672, 5,851,797, 5,843,775, and 5,821,124; International Patent Application WO 95/24473; European Patent Documents 476 983, 506 477, and 550 296; Japanese Patent Documents 1038100, 2117698, 2279698, and 3178996; and J. Folkman *et al.*, *A Family of Angiogenic Proteins*, *Nature*, 329, 671 (1987)).

## In the Claims

C2

C4

Please cancel claims 13-16 and 24 without prejudice or disclaimer of the subject matter contained therein.

Please amend claims 1, 4, 5, 19, and 22 to read as follows:

- A method for enhancing bone density or formation, the method comprising administering to at least one first cell associated with a region of a bone at least one first nucleic acid encoding a vascular endothelial growth factor, such that the first nucleic acid is expressed in the cell to produce the vascular endothelial growth factor, whereby bone density or formation is enhanced within the region, wherein the first cell is within the bone or within a tissue immediately surrounding the bone.
- 4. The method of claim 1, wherein the vascular endothelial growth factor is VEGF<sub>121</sub> or VEGF<sub>165</sub>.
- 5. The method of claim 1, wherein the vascular endothelial growth factor is selected from the group consisting of VEGFA<sub>138</sub>, VEGFA<sub>162</sub>, VEGF<sub>182</sub>, VEGF<sub>189</sub>, VEGF2, and VEGF-C.
  - 19. A viral vector comprising at least one first nucleic acid encoding a vascular endothelial growth factor and at least one second nucleic acid encoding at least one osteogenic protein.
- 22. A bone graft comprising at least one first cell having at least one first exogenous nucleic acid encoding a vascular endothelial growth factor and at least one second cell having at least one second nucleic acid encoding at least one osteogenic protein.